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Brian Schweitzer, Governor

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October 6, 2009

RECEIVED

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Office of Enforcement  
Compliance & Environmental  
Justice

Mr. Jon Nickel  
Asarco Inc.  
East Helena Plant  
P.O. Box 1230  
East Helena, MT 59635

**Subject: September 15, 2009, Compliance Evaluation Inspection - Asarco East Helena Plant (Direct Smelt Building and Adobe Shed)**

Dear Mr. Nickel:

Enclosed is my Field Investigation Report covering the Department's compliance inspection at Asarco's East Helena facility. Please review this report and enclosed document carefully.

At the time of the inspection, it appears that Asarco has met the clean-up and waste and/or secondary material disposal requirements for the Direct Smelt Building (DSB) and Adobe Shed in accordance with the 2009 Cleaning and Demolition Program and 2009 Interim Measures Work Plan Addendum. The 2009 Program/Work Plans were required by an Administrative Order on Consent (AOC) as ordered by the Department on October 2, 2007.

Please be advised that for any future use of these buildings, the user will need to demonstrate to the EPA and MDEQ that the buildings are safe for the next intended use.

I want to thank you for the time spent during my inspection. If you have any questions or need further assistance, please feel free to contact me at (406) 444-5852, or e-mail me at [ijohnson@mt.gov](mailto:ijohnson@mt.gov).

Sincerely,

Iver L. Johnson  
HW Specialist  
WUTM Bureau

Enc: Field Investigation Report with Photolog

cc: Denise A. Kirkpatrick, MDEQ, WUTM-HW

Ms. Linda Jacobson, EPA Region 8, 1595 Wynkoop St., Mail Code: 8ENF-RG,  
Denver, CO 80202-1179

**MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**Permitting and Compliance Division**  
**Waste & Underground Tank Management Bureau**

**FIELD INVESTIGATION REPORT**

**SITE:** Asarco - East Helena Facility

**EPA ID:** MTD006230346

**LOCATION:** East Helena

**DATES & TIMES:** September 15, 2009 @ 9:30 am

**INSPECTION LENGTH:** 1 Hour 30 Minutes

**CONTACT:** Jon Nickel, Asarco Representative

**INSPECTION TEAM:** Iver L. Johnson

**PURPOSE:** Compliance Evaluation Inspection

**REPORT PREPARED BY:** Iver L. Johnson

**BACKGROUND:** The purpose of this inspection was to inspect, confirm and document, via digital photographs, Asarco's efforts to clean the Direct Smelt Building (DSB) and Adobe Shed in accordance with the 2009 Work Plan.

In addition, the inspection team observed the stack demolition and clean-up activities at the Concentrate Storage and Handling Building (CSHB).

I previously arranged with Mr. Nickel to conduct this inspection on this date and time.

**RESULTS OF THE INSPECTION:** Upon arrival at the East Helena facility, I met with Mr. Nickel in his office.

We proceeded to drive to the Adobe Shed and Direct Smelt Building (DSB) where I took digital photographs to document the current status of the clean-up activities at these sites for inspection purposes.

Adobe Shed: *Cleaned.* The shed was used to mix adobe clay for use in the blast furnace operations. At the time of the inspection, it appeared that all secondary material had been removed. All interior surfaces of the shed, including the walls, ceiling, floor, concrete trench and supports were vacuum cleaned and washed with high pressure, low volume water. (Refer to photos 001 through 004 in the attached photolog.)

I noted during the inspection that two floor drains in the shed had not been cleaned. After the inspection, Mr. Nickel sent me an e-mail on September 15, 2009, letting me know that Asarco vacuum cleaned the two floor drains in the adobe shed. The material removed resembled dried adobe clay. They collected about one vacuum cleaner tank volume. (Refer to photos 005 and 006 in the attached photolog.)

Direct Smelt Building (DSB): *Cleaned.* IRS Environmental personnel completed the final stages of cleaning the building since my last inspection. All interior surfaces of the DSB, including the concrete floor and bins, metal structural beams, siding, ceiling, and ancillary features were vacuum cleaned and washed with high pressure, low volume water. (Refer to photos 007 through 012 in the attached photolog.)

CSHB: *Currently being cleaned.* At the time of the inspection, some of the exterior baghouses and ventilation ductwork that had been previously cleaned had been demolished and sent off for metal scrap recycling. (See photo 013 in the attached photolog.)

In addition, I observed Cleveland Wrecking Company personnel cutting the CSHB stack base and bringing the stack down in a controlled fall onto a water-downed area next to the CSHB. I observed very little stack emission dust when the stack hit the ground. (Refer to photos 014 through 021 in the attached photolog.)

Note: A copy of the digital photographs taken during this inspection is filed in the Department's Asarco facility folder along with this report.

**WASTE MINIMIZATION REVIEW:** None discussed.

**RECOMMENDATIONS:** Continue to adhere to Montana's Hazardous Waste Management regulations and the Standards for the Management of Used Oil.

October 5, 09

Date of Inspection Report

Iver L. Johnson

Iver L. Johnson  
Hazardous Waste Specialist

PHOTO #: ASARCO\_09258-001  
SUBJECT: Compliance Evaluation Inspection  
LOCATION: East Helena, MT.  
COUNTY: Lewis & Clark  
DATE OF VISIT: September 15, 2009  
WEATHER: Sunny  
PHOTOGRAPHER: Iver L. Johnson  
PHOTOGRAPHER (sig.) *Iver L. Johnson*  
WITNESS:  
CAMERA: Fujifilm Finepix F40 Digital Camera  
FILM TYPE: N/A  
NEGATIVE LOCATION: N/A  
EXPLANATION:

This photo shows the exterior and entrance to the Adobe Shed.

COPY



MT DEQ WUTM BUREAU

PHOTO #: ASARCO\_09258-002  
DATE: September 15, 2009

PHOTOGRAPHER: Iver L. Johnson  
PHOTOGRAPHER (int.) *Iver L. Johnson*  
CAMERA: Fujifilm Finepix F40 Digital Camera  
FILM TYPE: N/A  
NEGATIVE LOCATION: N/A  
EXPLANATION:

Looking inside the Adobe Shed from the entrance door.  
All interior surfaces of the shed were vacuum cleaned  
and washed down with high pressure, low volume water.

Note: The Adobe Shed was used to mix adobe clay for  
use in the blast furnace operations.



MT DEQ WUTM BUREAU

PHOTO #: ASARCO\_09258-003  
DATE: September 15, 2009

PHOTOGRAPHER: Iver L. Johnson  
PHOTOGRAPHER (int.) *Iver L. Johnson*  
CAMERA: Fujifilm Finepix F40 Digital Camera  
FILM TYPE: N/A  
NEGATIVE LOCATION: N/A  
EXPLANATION:

Another photo of the interior of the Adobe Shed.

The concrete support walls shown here in this photo  
were washed down with high pressure, low volume  
water.





**MT DEQ WUTM BUREAU**

PHOTO #: ASARCO\_09258-004  
DATE: September 15, 2009

PHOTOGRAPHER: Iver L. Johnson  
PHOTOGRAPHER (int.) I. Johnson  
CAMERA: Fujifilm Finepix F40 Digital Camera  
FILM TYPE: N/A  
NEGATIVE LOCATION: N/A  
EXPLANATION:

This photo shows the concrete trench in the floor of the Adobe Shed.

The trench was vacuumed and washed down with high pressure, low volume water.



**MT DEQ WUTM BUREAU**

PHOTO #: ASARCO\_09258-005  
DATE: September 15, 2009

PHOTOGRAPHER: Iver L. Johnson  
PHOTOGRAPHER (int.) I. Johnson  
CAMERA: Fujifilm Finepix F40 Digital Camera  
FILM TYPE: N/A  
NEGATIVE LOCATION: N/A  
EXPLANATION:

This photo shows one of two floor drains in the Adobe Shed. At the time of the inspection, the floor drains had not been cleaned.



**MT DEQ WUTM BUREAU**

PHOTO #: ASARCO\_09258-006  
DATE: September 15, 2009

PHOTOGRAPHER: Iver L. Johnson  
PHOTOGRAPHER (int.) I. Johnson  
CAMERA: Fujifilm Finepix F40 Digital Camera  
FILM TYPE: N/A  
NEGATIVE LOCATION: N/A  
EXPLANATION:

Looking inside one of the floor drains in the Adobe Shed before it was cleaned.

Asarco personnel cleaned the drains after the inspection and removed about one vacuum tank of dried adobe clay.





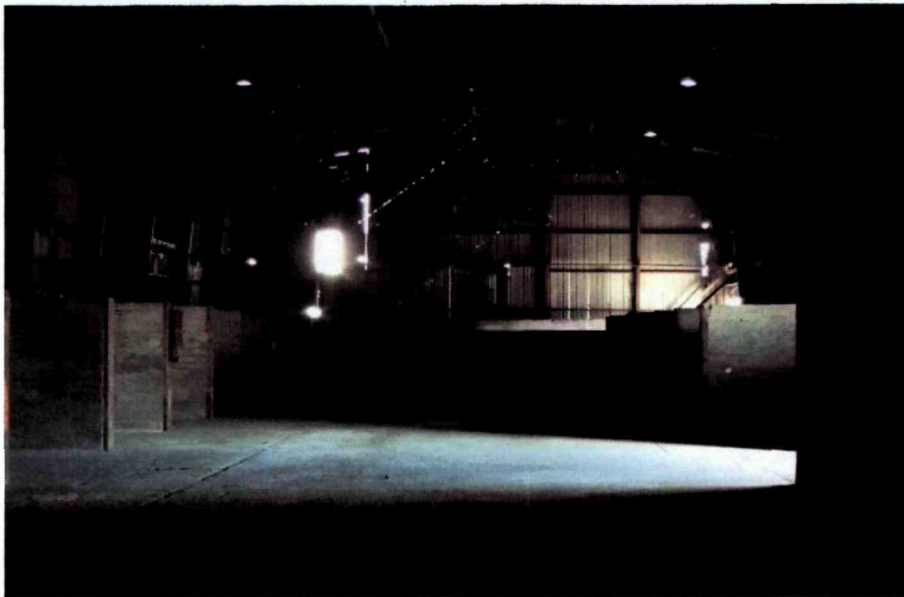
**MT DEQ WUTM BUREAU**

PHOTO #: ASARCO\_09258-007  
DATE: September 15, 2009

PHOTOGRAPHER: Iver L. Johnson  
PHOTOGRAPHER (int.) IJ  
CAMERA: Fujifilm Finepix F40 Digital Camera  
FILM TYPE: N/A  
NEGATIVE LOCATION: N/A  
EXPLANATION:

At the time of the inspection, IRS Environmental personnel had finished cleaning the Direct Smelt Building (DSB) as shown in this photo.

It appears that all the interior surfaces of the building to include the roof and ceiling beams, wall supports and former ore storage bins were vacuum cleaned and washed down with high pressure, low volume water.



**MT DEQ WUTM BUREAU**

PHOTO #: ASARCO\_09258-008  
DATE: September 15, 2009

PHOTOGRAPHER: Denise Kirkpatrick  
PHOTOGRAPHER (int.) DK  
CAMERA: Fujifilm Finepix F40 Digital Camera  
FILM TYPE: N/A  
NEGATIVE LOCATION: N/A  
EXPLANATION:

Another photo of the interior of the DSB that shows the roof and ceiling beams, wall supports and a portion of the ore storage bins.

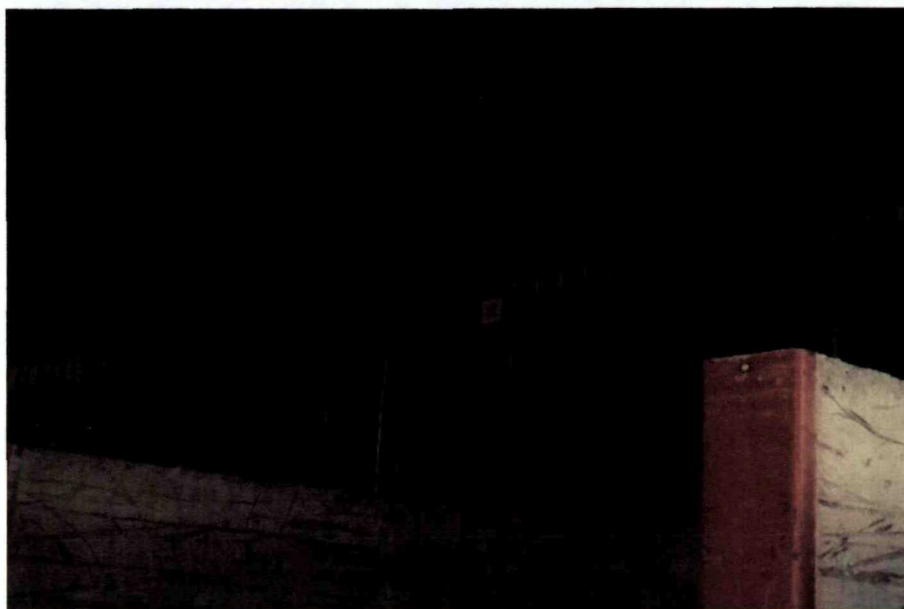


**MT DEQ WUTM BUREAU**

PHOTO #: ASARCO\_09258-009  
DATE: September 15, 2009

PHOTOGRAPHER: Iver L. Johnson  
PHOTOGRAPHER (int.) IJ  
CAMERA: Fujifilm Finepix F40 Digital Camera  
FILM TYPE: N/A  
NEGATIVE LOCATION: N/A  
EXPLANATION:

Another close-up photo of the tops of the ore storage concrete bins that were vacuum cleaned and washed down with high pressure, low volume water.



**MT DEQ WUTM BUREAU**

PHOTO #: ASARCO\_09258-010  
DATE: September 15, 2009

PHOTOGRAPHER: Iver L. Johnson  
PHOTOGRAPHER (int.) \_\_\_\_\_  
CAMERA: Fujifilm Finepix F40 Digital Camera  
FILM TYPE: N/A  
NEGATIVE LOCATION: N/A  
EXPLANATION:

This photo shows the ceiling and roof support beams in the DSB. Note the holes in the ceiling.

This building was not certified to be a hazardous waste storage facility due to the holes in the ceiling.



**MT DEQ WUTM BUREAU**

PHOTO #: ASARCO\_09258-011  
DATE: September 15, 2009

PHOTOGRAPHER: Iver L. Johnson  
PHOTOGRAPHER (int.) \_\_\_\_\_  
CAMERA: Fujifilm Finepix F40 Digital Camera  
FILM TYPE: N/A  
NEGATIVE LOCATION: N/A  
EXPLANATION:

Another view of the interior of the DSB near the east end of the building. The crane system used to move the ore within the building is shown in the upper portion of the photo.



**MT DEQ WUTM BUREAU**

PHOTO #: ASARCO\_09258-012  
DATE: September 15, 2009

PHOTOGRAPHER: Iver L. Johnson  
PHOTOGRAPHER (int.) \_\_\_\_\_  
CAMERA: Fujifilm Finepix F40 Digital Camera  
FILM TYPE: N/A  
NEGATIVE LOCATION: N/A  
EXPLANATION:

Close-up of the crane system used in the DSB.

It appears that the crane system was vacuum cleaned and free of any visible material from where the photo was taken.





**MT DEQ WUTM BUREAU**

PHOTO #: ASARCO\_09258-013

DATE: September 15, 2009

PHOTOGRAPHER: Iver L. Johnson

PHOTOGRAPHER (int.) *[Signature]*

CAMERA: Fujifilm Finepix F40 Digital Camera

FILM TYPE: N/A

NEGATIVE LOCATION: N/A

EXPLANATION:

At the time of the inspection, some of the exterior ductwork and bag houses had already been removed from the wall of the Concentrate Storage and Handling Building (CSHB) as shown in this photo.



**MT DEQ WUTM BUREAU**

PHOTO #: ASARCO\_09258-014

DATE: September 15, 2009

PHOTOGRAPHER: Iver L. Johnson

PHOTOGRAPHER (int.) *[Signature]*

CAMERA: Fujifilm Finepix F40 Digital Camera

FILM TYPE: N/A

NEGATIVE LOCATION: N/A

EXPLANATION:

This photo shows a water truck putting water on the ground in anticipation on where the CSHB stack will fall.



**MT DEQ WUTM BUREAU**

PHOTO #: ASARCO\_09258-015

DATE: September 15, 2009

PHOTOGRAPHER: Iver L. Johnson

PHOTOGRAPHER (int.) *[Signature]*

CAMERA: Fujifilm Finepix F40 Digital Camera

FILM TYPE: N/A

NEGATIVE LOCATION: N/A

EXPLANATION:

As shown in this photo, CWC personnel were using cutting torches to cut the CSHB stack from its base on the north side of the CSHB.





**MT DEQ WUTM BUREAU**

PHOTO #: ASARCO\_09258-016  
DATE: September 15, 2009

PHOTOGRAPHER: Iver L. Johnson  
PHOTOGRAPHER (int.)                       
CAMERA: Fujifilm Finepix F40 Digital Camera  
FILM TYPE: N/A  
NEGATIVE LOCATION: N/A  
EXPLANATION:

This is probably one of the last photos of the CSHB ventilation stack prior to demolition. The stack came down about a minute later after this photo was taken.



**MT DEQ WUTM BUREAU**

PHOTO #: ASARCO\_09258-017  
DATE: September 15, 2009

PHOTOGRAPHER: Iver L. Johnson  
PHOTOGRAPHER (int.)                       
CAMERA: Fujifilm Finepix F40 Digital Camera  
FILM TYPE: N/A  
NEGATIVE LOCATION: N/A  
EXPLANATION:

The CSHB stack came down exactly where the demolition crew wanted it to fall.

Note: Very little stack debris dust was observed when the stack hit the ground.

Most, if not all, of the stack was metal which was sent off for metal recycling after CWC ensured that the metal was free of any hazardous debris.



**MT DEQ WUTM BUREAU**

PHOTO #: ASARCO\_09258-018  
DATE: September 15, 2009

PHOTOGRAPHER: Iver L. Johnson  
PHOTOGRAPHER (int.)                       
CAMERA: Fujifilm Finepix F40 Digital Camera  
FILM TYPE: N/A  
NEGATIVE LOCATION: N/A  
EXPLANATION:

Looking into the CSHB ventilation stack from the stack base. For the most part, the interior of the stack was clean and free of accumulated material.





PHOTO #: ASARCO\_09258-019  
DATE: September 15, 2009

All that was left of the CSHB stack was the stack base as shown in this photo.

The base was dismantled and the metal was sent off for metal recovery.

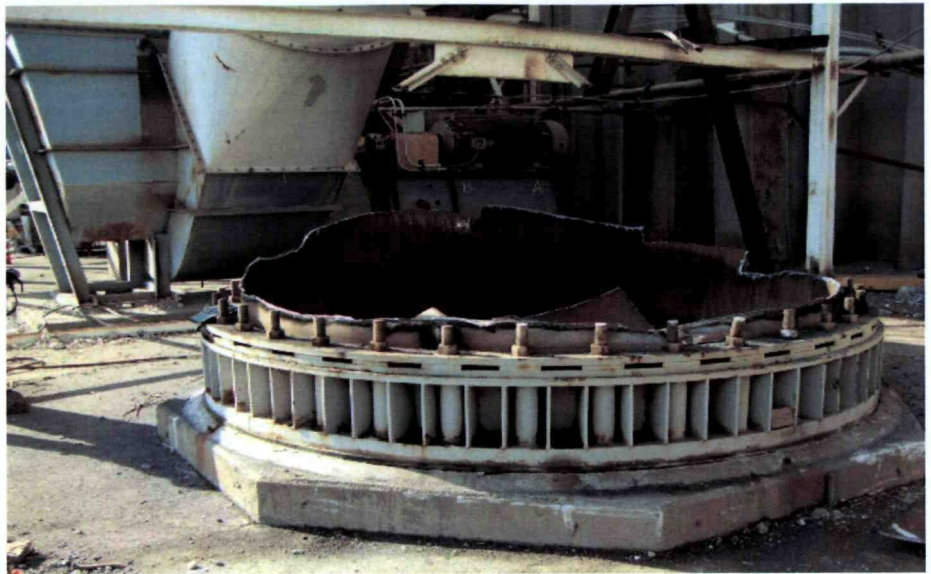


PHOTO #: ASARCO\_09258-020  
DATE: September 15, 2009

Another photo of the CSHB stack.

Note that the equipment used to rip and tear the stack apart was on its way when the photo was taken.



PHOTO #: ASARCO\_09258-021  
DATE: September 15, 2009

This photo shows the viewer the collapsed CSHB stack from the top of the stack to the base.

